

=> FILE REG

FILE 'REGISTRY' ENTERED AT 10:43:06 ON 21 AUG 2008
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=> D HIS

FILE 'LREGISTRY' ENTERED AT 10:30:56 ON 21 AUG 2008

L1 STR
L2 1 S L1
L3 0 S 2 3641.1.12/RID

FILE 'REGISTRY' ENTERED AT 10:35:09 ON 21 AUG 2008

L4 440 S 1<RID.CNT (T) 3641.1.12/RID
L5 94 S L4 AND 1<N
L6 237 S L4 AND 4<NRS
L7 50 S L5 AND L6
L8 33 S L7 AND 3/ELC.SUB
L9 17 S L7 NOT L8

FILE 'CAOLD' ENTERED AT 10:41:29 ON 21 AUG 2008

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L11 0 S L9

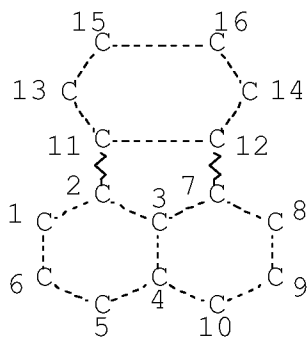
FILE 'ZCA' ENTERED AT 10:41:30 ON 21 AUG 2008

L12 22 S L8
L13 6 S L9
L14 13 S 1840-2004/PY,PRY,AY AND L12
L15 6 S 1840-2004/PY,PRY,AY AND L13

FILE 'REGISTRY' ENTERED AT 10:43:06 ON 21 AUG 2008

=> D L1

L1 HAS NO ANSWERS
L1 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

=> FILE ZCA

FILE 'ZCA' ENTERED AT 10:43:24 ON 21 AUG 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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=> D L14 1-13 BIB ABS HITSTR HITRN

L14 ANSWER 1 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 144:222330 ZCA Full-text

TI Electroluminescent chrysene derivatives, and organic
electroluminescent devices and displays comprising them in emission
layers

IN Matsunami, Shigeyuki; Miyabayashi, Yoshihisa; Ichimura, Mari;
Tamura, Shinichiro

PA Sony Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

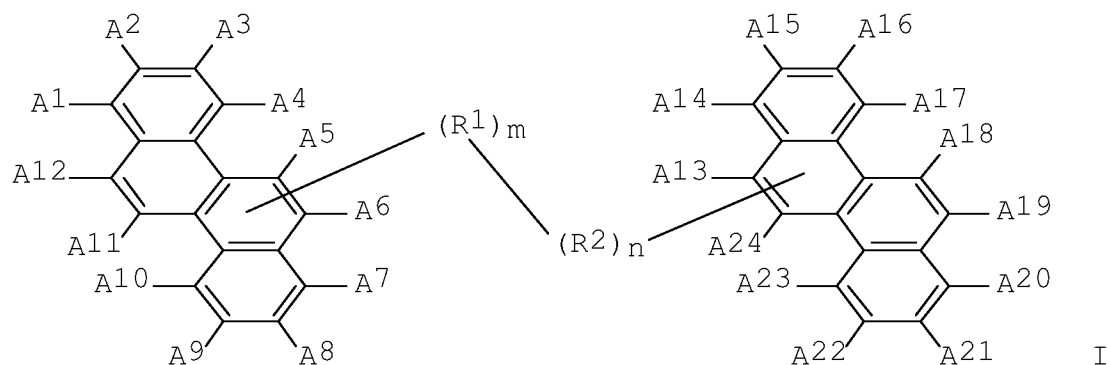
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006052324	A	20060223	JP 2004-235124	20040812

PRAI JP 2004-235124

20040812 <--

OS MARPAT 144:222330

GI



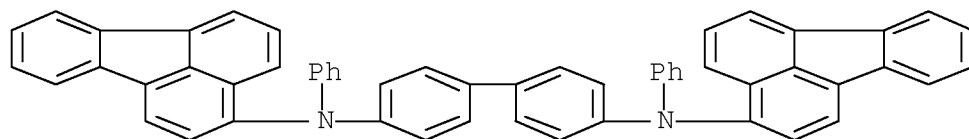
AB Claimed are I [A1-24 = H, halo, OH, C \leq 20 (substituted) carbonyl (ester), alkyl, alkenyl, etc.; R1-2 = C \leq 30 (substituted) aryl, heterocycle; m, n = integer of 0-2; m + n = 1-4]. The compds. can be included as electron-transport agents or hole-transport agents, and the devices/displays show high emission efficiency and long service life.

IT 851767-73-2

(dopant; in electroluminescent chrysene derivs. for org. electroluminescent devices/displays)

RN 851767-73-2 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-diphenyl- (CA INDEX NAME)



IT 851767-73-2

(dopant; in electroluminescent chrysene derivs. for org.
electroluminescent devices/displays)

L14 ANSWER 2 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 144:222329 ZCA Full-text

TI Electroluminescent bichrysenes, and organic electroluminescent
devices and displays comprising them in emission layers

IN Matsunami, Shigeyuki; Miyabayashi, Yoshihisa; Ichimura, Mari;
Tamura, Shinichiro

PA Sony Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF

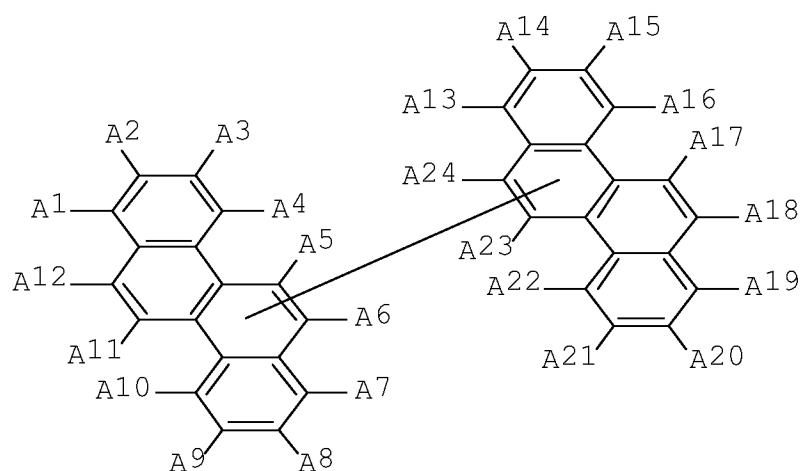
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2006052323	A	20060223	JP 2004-235123	200408 12
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PRAI	JP 2004-235123		20040812	<--	
OS	MARPAT 144:222329				
GI					



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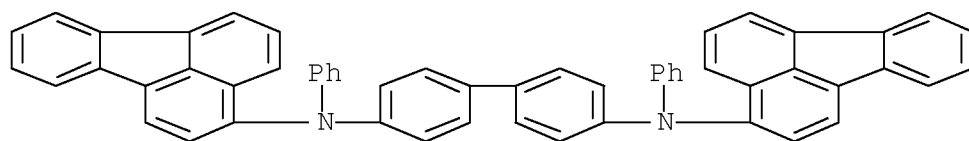
AB Claimed are the bichrysenes I [A1-24 = H, halo, OH, C_≤20 (substituted) carbonyl (ester), alkyl, alkenyl, etc.]. The bichrysenes can be included as electron-transport agents or hole-transport agents, and the devices/displays show high emission efficiency and long service life.

IT 851767-73-2

(dopant; in electroluminescent bichrysenes for org. electroluminescent devices/displays)

RN 851767-73-2 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-diphenyl- (CA INDEX NAME)



IT 851767-73-2

(dopant; in electroluminescent bichrysenes for org. electroluminescent devices/displays)

L14 ANSWER 3 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 144:195370 ZCA [Full-text](#)

TI Molecular photovoltaics, method of manufacture and articles derived therefrom

IN Gui, John Yupeng; Spivack, James Lawrence; Duggal, Anil Raj; Cella,

James Anthony; Alizadeh, Azar; Yakimov, Aharon

PA USA

SO U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	US 20060021647	A1	20060202	US 2004-900624	200407 28
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	EP 1630883	A2	20060301	EP 2005-254258	200507 07
				<--	
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	JP 2006049890	A	20060216	JP 2005-216748	200507 27
				<--	
	CN 1734792	A	20060215	CN 2005-10087971	200507 28
				<--	

PRAI US 2004-900624 A 20040728 <--

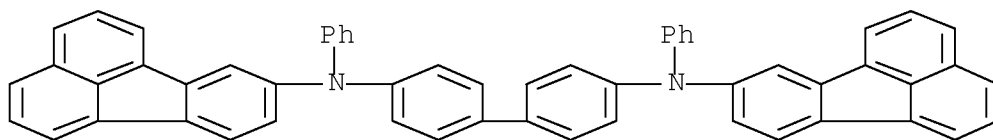
AB Disclosed herein is a photovoltaic cell comprising an absorber that can absorb electromagnetic radiation; a 1st substrate comprising a 1st conductive surface; a 2nd substrate comprising a 2nd conductive surface that is opposed to the 1st conductive surface and faces the 1st conductive surface of the 1st substrate; an electron transporter that is in elec. communication with the 2nd conductive surface of the 2nd substrate, but is elec. insulated from the 1st substrate; a hole transporter that is in elec. communication with the 1st conductive surface of the 1st substrate, but is elec. insulated from the 2nd substrate; wherein the hole transporter and/or the electron transporter are chem. bonded to an elec. insulating sheath; and wherein the hole transporter and/or the electron transporter are chem. bonded to the absorber.

IT 139255-23-5

(conducting polymer and hole and electron transport in mol.
photovoltaic materials and devices)

RN 139255-23-5 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-8-fluoranthenyl-N4,N4'-
diphenyl- (CA INDEX NAME)



IT 139255-23-5
(conducting polymer and hole and electron transport in mol.
photovoltaic materials and devices)

L14 ANSWER 4 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 144:117548 ZCA Full-text

TI Organic electroluminescent devices with high luminosity and long
lifetime and amines therefor

IN Totani, Yoshiyuki; Tanabe, Yoshimitsu; Ochi, Takahiko; Tsukada,
Hidetaka; Shimamura, Takehiko

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 64 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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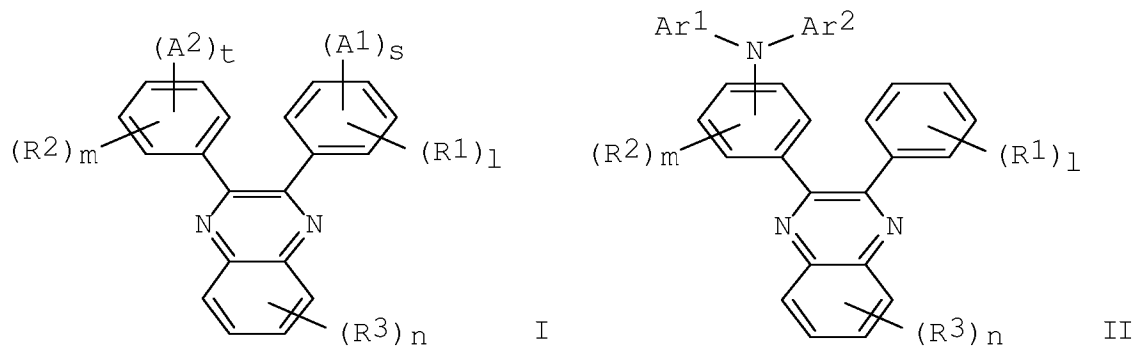
PI	JP 2006016384	A	20060119	JP 2005-159559	200505 31

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PRAI JP 2004-165607 A 20040603 <--

OS MARPAT 144:117548

GI



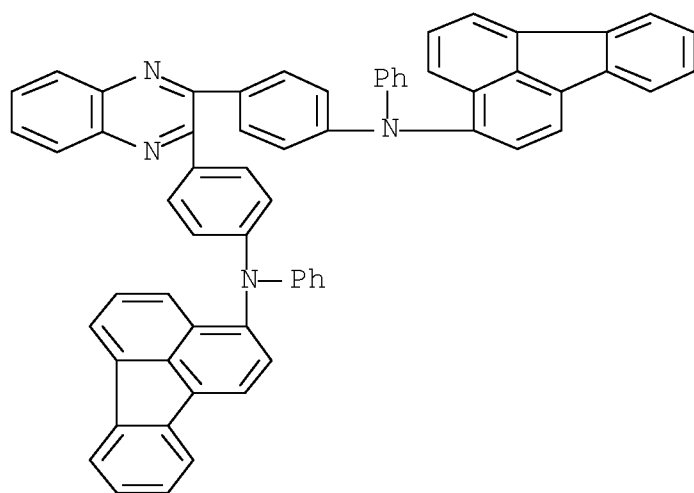
AB The amines are I [R1-R3 = halo, amino, Xn'Z (Z = linear, branched, or cyclic alkyl, aryl, aralkyl; X = O, S; n' = 0, 1); l, m, n = 0-4; A1, A2 = Ar1Ar2N (Ar1, Ar2 = aryl, linear, branched, or cyclic alkyl, aralkyl); s, t = 0-5; s + l ≤ 5; t + m ≤ 5; s and/or t ≥ 1] or II [R1, R2 = halo, Xn'Z (Z, X, n' = same as above); R3 = halo, amino, Xn'Z (Z, X, n' = same as above); l, m, n = 0-4; Ar1, Ar2 = same as above]. Also claimed are org. EL devices (e.g., LCD backlight, planar light sources) having the amines between a pair of electrodes.

IT 873000-39-6P

(substituted 2,3-diphenylquinoxalines for org. electroluminescent devices with high luminosity and long lifetime)

RN 873000-39-6 ZCA

CN 3-Fluorantheneamine, N,N'-(2,3-quinoxalinediyl-di-4,1-phenylene)bis[N-phenyl- (9CI) (CA INDEX NAME)



IT 873000-39-6P

(substituted 2,3-diphenylquinoxalines for org. electroluminescent devices with high luminosity and long lifetime)

L14 ANSWER 5 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 143:469728 ZCA Full-text

TI Organic compound for electroluminescent device

IN Schaefer, Thomas; Bardon, Kristina

PA Ciba Specialty Chemicals Holding Inc., Switz.

SO PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PI	WO 2005105950	A1	20051110	WO 2005-EP51731	20050420

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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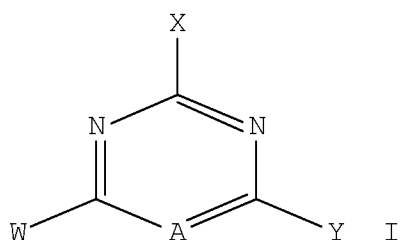
EP	1743011	A1	20070117	EP 2005-747379	20050420
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CN	1950479	A	20070418	CN 2005-80013601	20050420
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BR	2005010482	A	20071106	BR	2005-10482
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JP	2007534722	T	20071129	JP	2007-510020
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IN	2006CN03974	A	20070727	IN	2006-CN3974
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KR	2007010191	A	20070122	KR	2006-725158
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PRAI	EP 2004-101826	A	20040429	<--	
	WO 2005-EP51731	W	20050420		
OS	MARPAT 143:469728				
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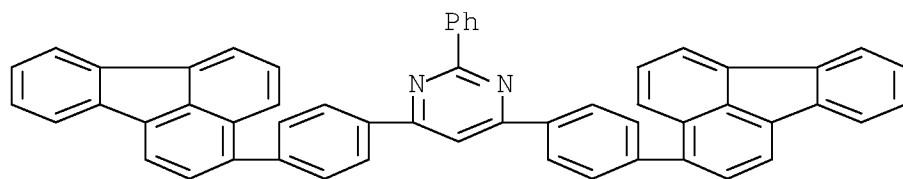


AB A org. compd. is described by the general formula I (where A = CH, N;
X,W,Y = (independently) arom. groups described in the text). An
electroluminescent devices using the org. compd. is also described.

IT 869016-09-1P
(triazine or pyrimidine compds. for electroluminescent device)

RN 869016-09-1 ZCA

CN Pyrimidine, 4,6-bis[4-(3-fluoranthenyl)phenyl]-2-phenyl- (CA INDEX
NAME)



IT 869016-09-1P

(triazine or pyrimidine compds. for electroluminescent device)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 143:356324 ZCA Full-text

TI Organic substance for organic electroluminescent device

IN Matsunami, Shigeyuki; Takada, Kazunori

PA Sony Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2005272803	A	20051006	JP 2004-280868	200409 28

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PRAI JP 2004-47478 A 20040224 <--

OS MARPAT 143:356324

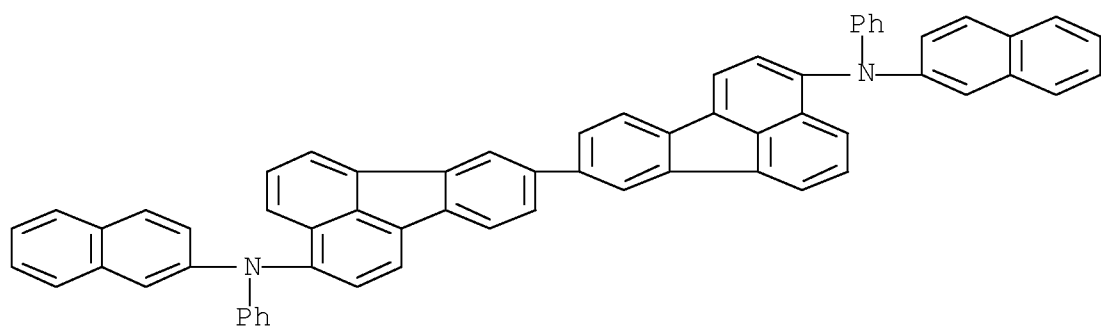
AB The invention relates to an org. substance suited for use in an org. electroluminescent device, comprising amino group-substituted bifluoranthene derivs.

IT 866022-37-9P 866022-38-0P

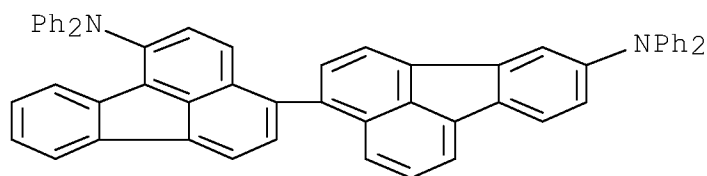
(org. substance for org. electroluminescent device)

RN 866022-37-9 ZCA

CN [8,8'-Bifluoranthene]-3,3'-diamine, N3,N3'-di-2-naphthalenyl-N3,N3'-diphenyl- (CA INDEX NAME)



RN 866022-38-0 ZCA
 CN [3,3'-Bifluoranthene]-6,9'-diamine, N6,N6,N9',N9'-tetraphenyl- (CA
 INDEX NAME)



IT 866022-37-9P 866022-38-0P
 (org. substance for org. electroluminescent device)

L14 ANSWER 7 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 142:472316 ZCA Full-text

TI Organic electroluminescent device and display

IN Ueda, Naoyuki; Takada, Ichinori

PA Sony Corporation, Japan

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2005044942	A1	20050519	WO 2004-JP16794	20041105

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GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
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DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL,
PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG

JP 2006100756 A 20060413 JP 2004-315487

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TW 247553 B 20060111 TW 2004-93133918

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EP 1690912 A1 20060816 EP 2004-799645

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R: DE, FR, GB
CN 1902296 A 20070124 CN 2004-80039888

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PRAI JP 2003-377905 A 20031107 <--
JP 2004-252263 A 20040831 <--
JP 2004-315487 A 20041029 <--
WO 2004-JP16794 W 20041105 <--

OS MARPAT 142:472316

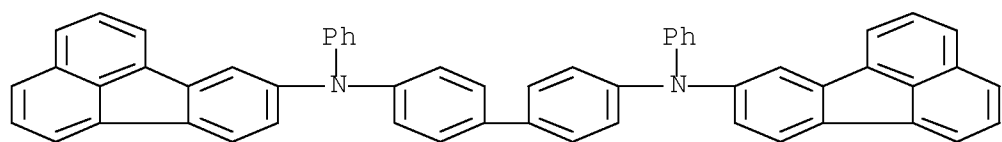
AB An org. electroluminescent device is characterized in that it emits green light by contg. a fluoranthene deriv. in a light-emitting layer. The fluoranthene deriv. is introduced into the light-emitting layer as a guest material, and the green org. electroluminescent device can have sufficiently good luminous efficiency and color purity and can be more reliable by using an org. material having a fluorescent spectrum overlapping the absorption spectrum of the fluoranthene deriv., such as an aryl anthracene deriv., as the host material.

IT 139255-23-5 851767-73-2 851767-74-3
851767-75-4 851767-77-6 851767-82-3
851767-83-4 851767-84-5 851768-03-1

(org. electroluminescent device and display)

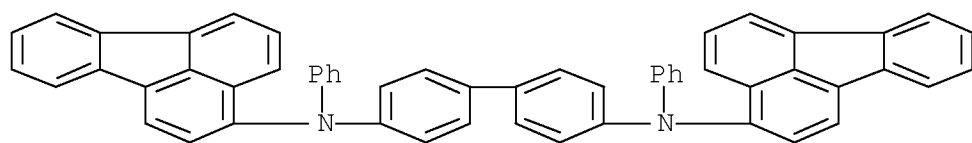
RN 139255-23-5 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-8-fluoranthenyl-N4,N4'-diphenyl- (CA INDEX NAME)



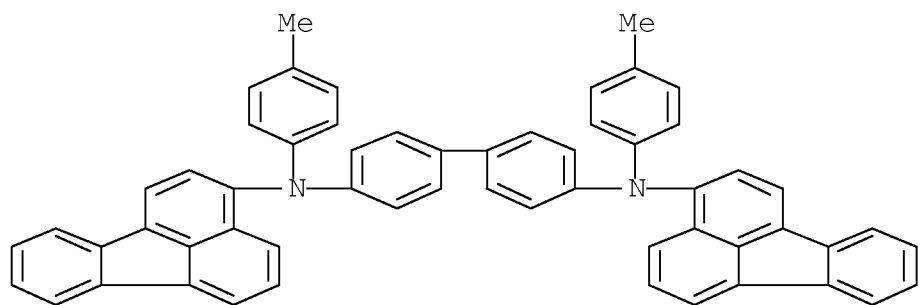
RN 851767-73-2 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-diphenyl- (CA INDEX NAME)



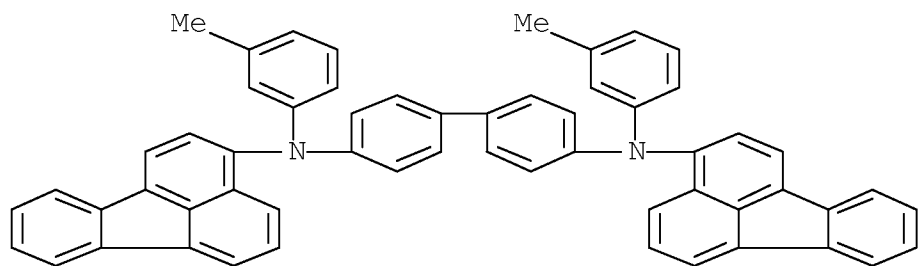
RN 851767-74-3 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-bis(4-methylphenyl)- (CA INDEX NAME)



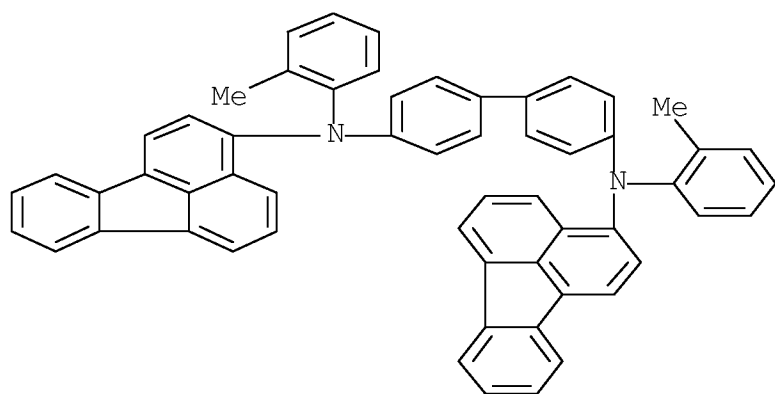
RN 851767-75-4 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-bis(3-methylphenyl)- (CA INDEX NAME)



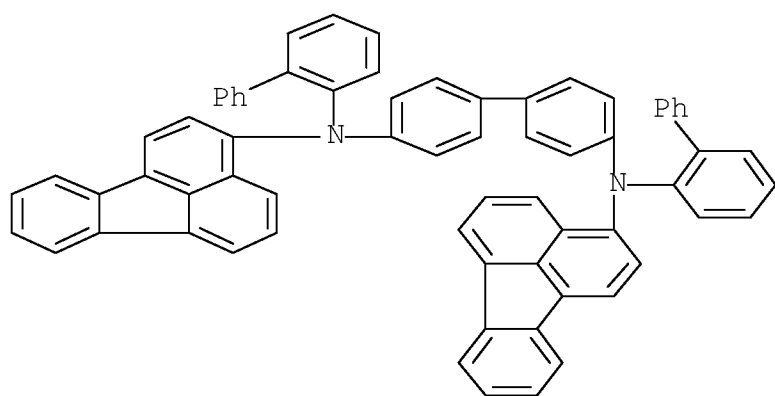
RN 851767-77-6 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-bis(2-methylphenyl)- (CA INDEX NAME)



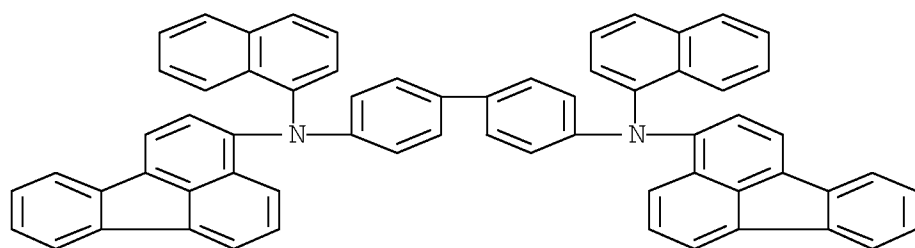
RN 851767-82-3 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-bis([1,1'-biphenyl]-2-yl)-N4,N4'-di-3-fluoranthenyl- (CA INDEX NAME)



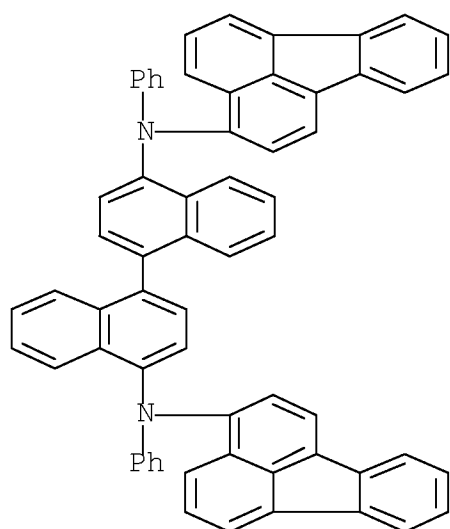
RN 851767-83-4 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-di-1-naphthalenyl- (CA INDEX NAME)

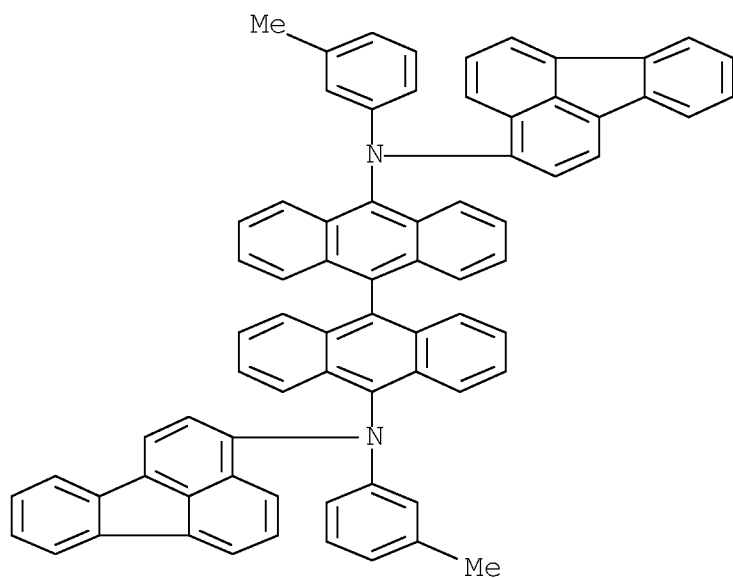


RN 851767-84-5 ZCA

CN [1,1'-Binaphthalene]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-diphenyl- (CA INDEX NAME)



RN 851768-03-1 ZCA
 CN [9,9'-Bianthracene]-10,10'-diamine, N10,N10'-di-3-fluoranthenyl-N10,N10'-bis(3-methylphenyl)- (CA INDEX NAME)



IT 139255-23-5 851767-73-2 851767-74-3
 851767-75-4 851767-77-6 851767-82-3
 851767-83-4 851767-84-5 851768-03-1

(org. electroluminescent device and display)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 142:472274 ZCA Full-text

TI Organic light-emitting material and its preparation method

IN Takada, Ichinori; Ueda, Naoyuki

PA Sony Corporation, Japan

SO PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DT Patent

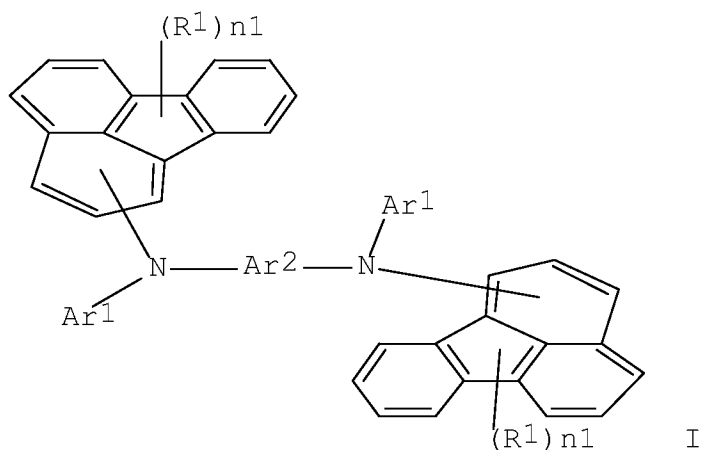
LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2005044943	A1	20050519	WO 2004-JP16803	20041105
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2006096964	A	20060413	JP 2004-315486	20041029
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CN 1906267	A	20070131	CN 2004-80040055	20041105
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TW 287039	B	20070921	TW 2004-93133920	20041105
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US 20070149815	A1	20070628	US 2006-595710	200605

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PRAI JP 2003-377904 A 20031107 <--
 JP 2004-255344 A 20040902 <--
 JP 2004-315486 A 20041029 <--
 WO 2004-JP16803 W 20041105 <--
 OS MARPAT 142:472274
 GI



AB Disclosed is an org. light-emitting material which is characterized by being represented by the general formula I and used in a light-emitting layer of a green light-emitting device. In the general formula I, n_1 is an integer of not less than 1 and not more than 3; R_1 represents an alkyl group having 10 or less carbon atoms; Ar_1 represents a monovalent group which is derived from a monocyclic or condensed-ring arom. hydrocarbon having 20 or less carbon atoms, and may have a substituent having 10 or less carbon atoms; and Ar_2 represents a divalent group which is derived from a ring assembly including 1-3 rings, having 30 or less carbon atoms and being constituted by a monocyclic or condensed-ring arom. hydrocarbon, and may have a substituent having 4 or less carbon atoms. Consequently, there is provided a more highly reliable org. light-emitting material with sufficiently good luminous efficiency and color purity which is suitable for constituting a green light-emitting layer. Also disclosed is a method for producing such an org. light-emitting material.

IT 851767-73-2P 851767-74-3P 851767-75-4P

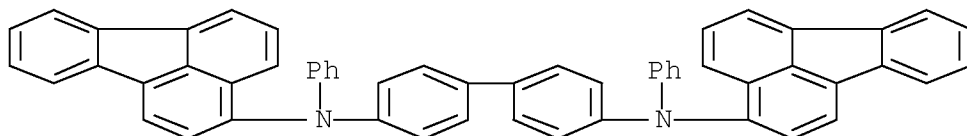
851767-77-6P 851767-78-7P 851767-80-1P

851767-82-3P 851767-83-4P 851767-84-5P

(org. light-emitting material and prepn. method)

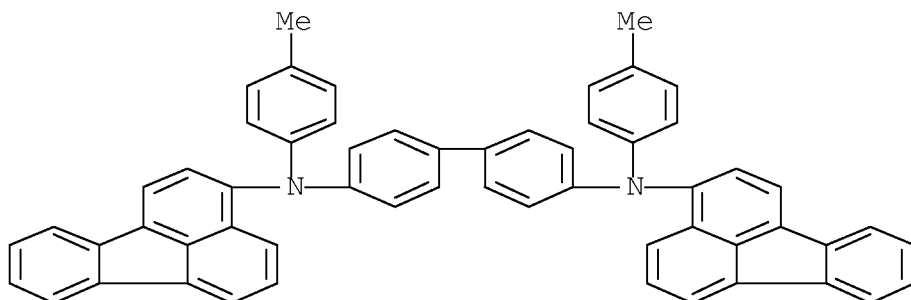
RN 851767-73-2 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-diphenyl- (CA INDEX NAME)



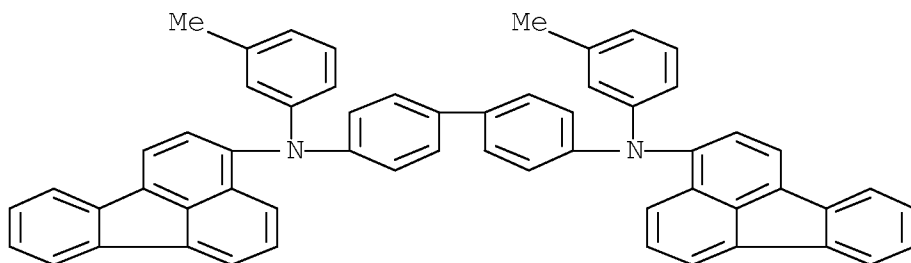
RN 851767-74-3 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-bis(4-methylphenyl)- (CA INDEX NAME)



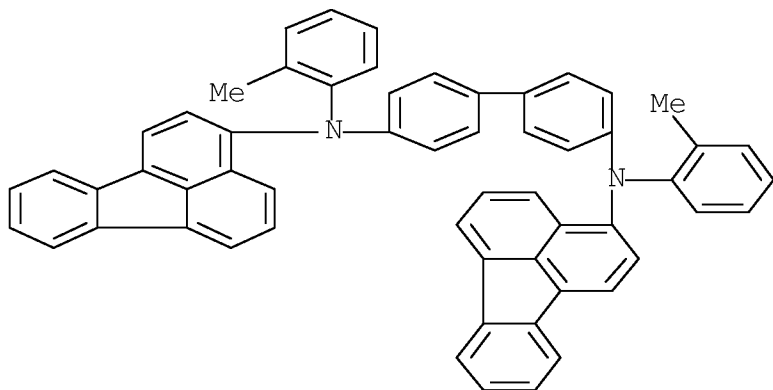
RN 851767-75-4 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-bis(3-methylphenyl)- (CA INDEX NAME)



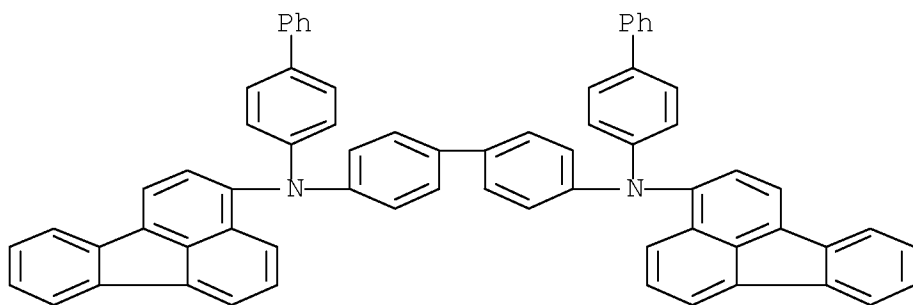
RN 851767-77-6 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-bis(2-methylphenyl)- (CA INDEX NAME)



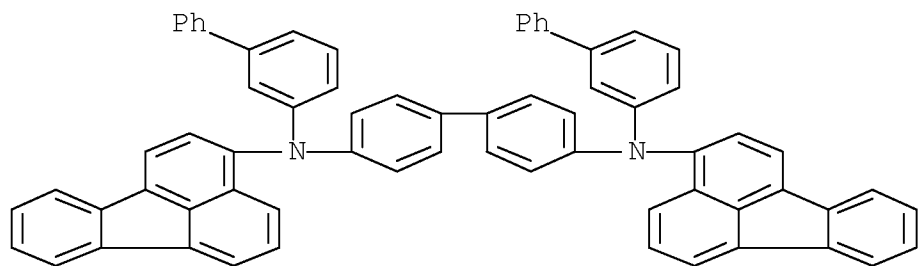
RN 851767-78-7 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-bis([1,1'-biphenyl]-4-yl)-N4,N4'-di-3-fluoranthenyl- (CA INDEX NAME)



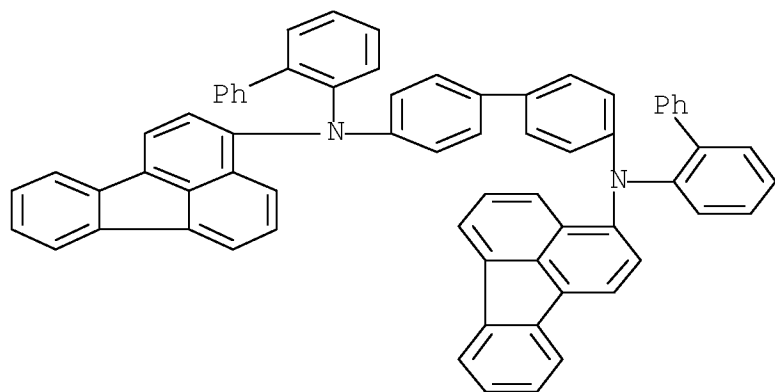
RN 851767-80-1 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-bis([1,1'-biphenyl]-3-yl)-N4,N4'-di-3-fluoranthenyl- (CA INDEX NAME)



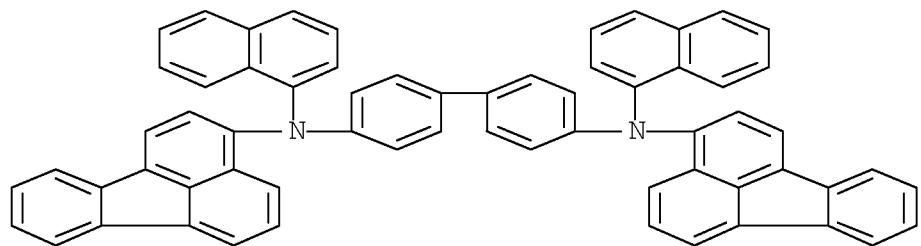
RN 851767-82-3 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-bis([1,1'-biphenyl]-2-yl)-
N4,N4'-di-3-fluoranthenyl- (CA INDEX NAME)

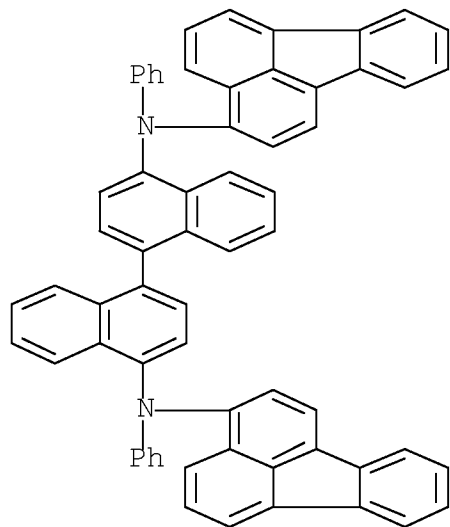


RN 851767-83-4 ZCA

CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-di-1-
naphthalenyl- (CA INDEX NAME)



RN 851767-84-5 ZCA
CN [1,1'-Binaphthalene]-4,4'-diamine, N4,N4'-di-3-fluoranthenyl-N4,N4'-
diphenyl- (CA INDEX NAME)



IT 851767-73-2P 851767-74-3P 851767-75-4P
851767-77-6P 851767-78-7P 851767-80-1P
851767-82-3P 851767-83-4P 851767-84-5P

(org. light-emitting material and prepn. method)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 142:29756 ZCA Full-text

TI Organic electroluminescent devices and heat-resistant durable
fluorenylamines therefor

IN Totani, Yoshiyuki; Shimamura, Takehiko; Tanabe, Yoshimitsu; Tsukada,
Hidetaka

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 32 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

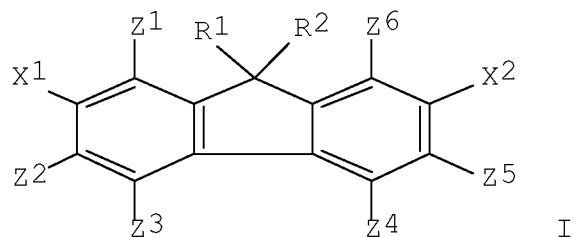
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004339064	A	20041202	JP 2003-133908	

200305

PRAI JP 2003-133908
OS MARPAT 142:29756
GI

20030513 <--

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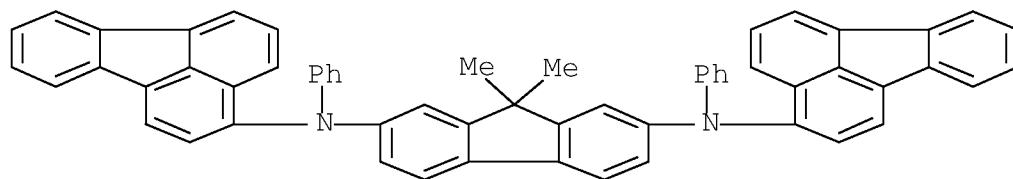
AB The fluorenylamines are I [X1 = N-carbazolyl, NAr1Ar2; X2 = NAr3Ar4; Ar1-Ar4 = aryl; ≥ 1 of Ar1-Ar4 = fluorenyl; Z1-Z6 = H, halo, OnZ; Z = linear, branched, or cyclic alkyl, aryl; n = 0, 1; R1, R2 = H, linear, branched, or cyclic alkyl, aryl, aralkyl]. Also claimed are electroluminescent devices having ≥ 1 layers (e.g., hole-injection/transport layers, luminescent layers) contg. the amines between a pair of electrodes.

IT 799559-69-6P 799559-73-2P 799559-77-6P
799559-81-2P 799559-84-5P 799559-87-8P

(org. electroluminescent devices contg. fluorenyl
fluorenylamines with good heat resistance and durability)

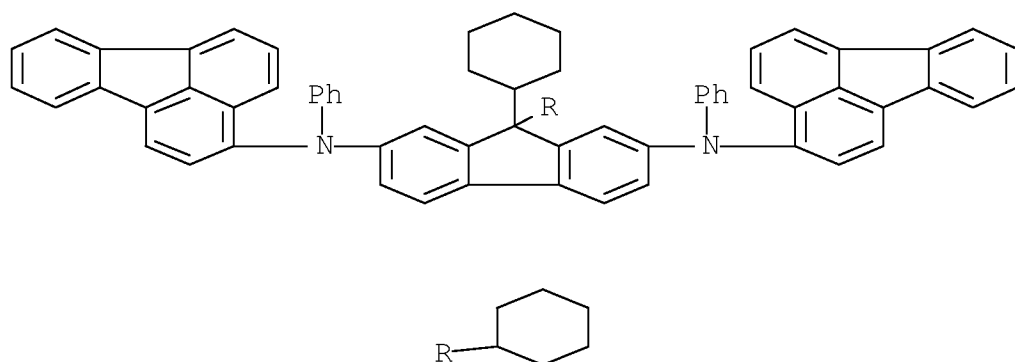
RN 799559-69-6 ZCA

CN 9H-Fluorene-2,7-diamine, N2,N7-di-3-fluorenyl-9,9-dimethyl-N2,N7-diphenyl- (CA INDEX NAME)



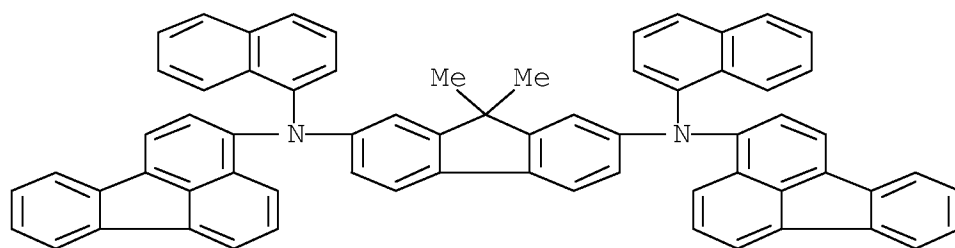
RN 799559-73-2 ZCA

CN 9H-Fluorene-2,7-diamine, 9,9-dicyclohexyl-N2,N7-di-3-fluoranthenyl-N2,N7-diphenyl- (CA INDEX NAME)



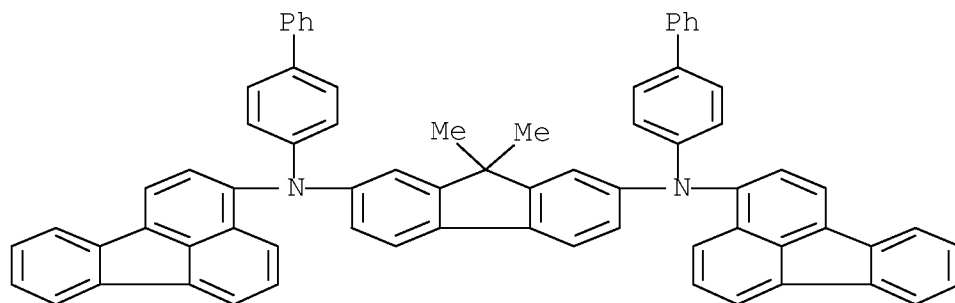
RN 799559-77-6 ZCA

CN 9H-Fluorene-2,7-diamine, N2,N7-di-3-fluoranthenyl-9,9-dimethyl-N2,N7-di-1-naphthalenyl- (CA INDEX NAME)

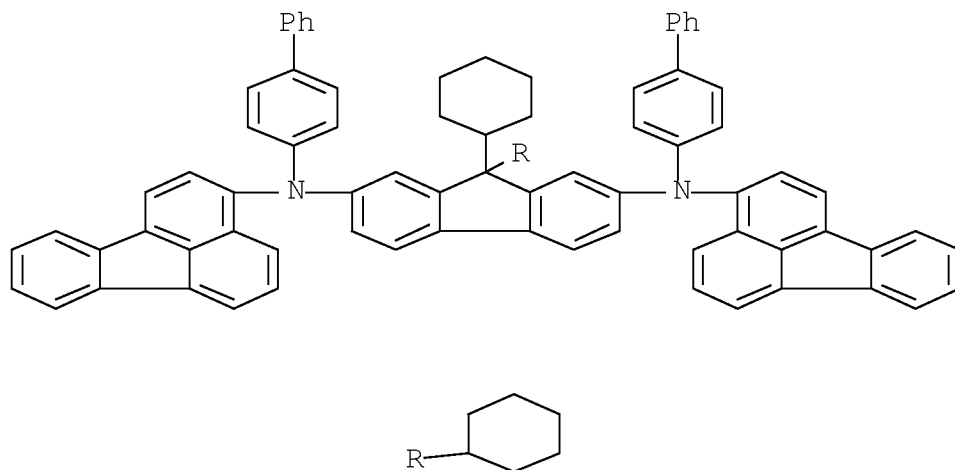


RN 799559-81-2 ZCA

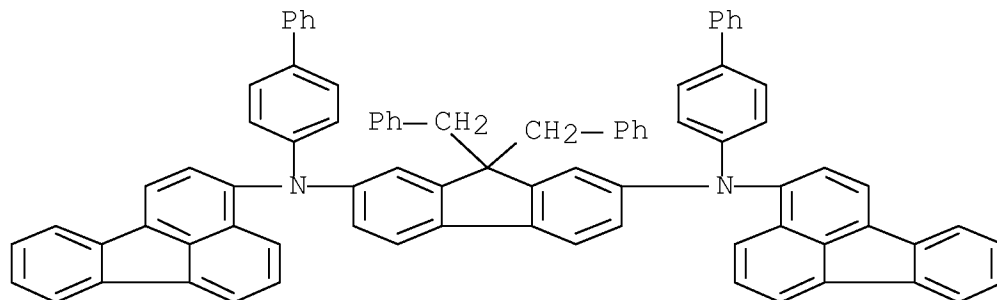
CN 9H-Fluorene-2,7-diamine, N2,N7-bis([1,1'-biphenyl]-4-yl)-N2,N7-di-3-fluoranthenyl-9,9-dimethyl- (CA INDEX NAME)



RN 799559-84-5 ZCA
 CN 9H-Fluorene-2,7-diamine, N2,N7-bis([1,1'-biphenyl]-4-yl)-9,9-dicyclohexyl-N2,N7-di-3-fluoranthenyl- (CA INDEX NAME)



RN 799559-87-8 ZCA
 CN 9H-Fluorene-2,7-diamine, N2,N7-bis([1,1'-biphenyl]-4-yl)-N2,N7-di-3-fluoranthenyl-9,9-bis(phenylmethyl)- (CA INDEX NAME)



IT 799559-69-6P 799559-73-2P 799559-77-6P
 799559-81-2P 799559-84-5P 799559-87-8P
 (org. electroluminescent devices contg. fluoranthenyl
 fluorenylamines with good heat resistance and durability)

L14 ANSWER 10 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 140:311707 ZCA Full-text
 TI Phenanthroline compound and organic light emitting device using same
 IN Okajima, Maki; Kawai, Tatsundo; Takiguchi, Takao; Suzuki, Koichi;
 Senoo, Akihiro; Hasegawa, Toshinori; Okinaka, Keiji
 PA Canon Kabushiki Kaisha, Japan
 SO PCT Int. Appl., 69 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2004026870	A1	20040401	WO 2003-JP11485	20030909

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP	2004107263	A	20040408	JP 2002-272408	20020919
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AU	2003260955	A1	20040408	AU 2003-260955	20030909
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US	20060097227	A1	20060511	US 2005-527192	20050310
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PRAI	JP 2002-272408	A	20020919	<--
	WO 2003-JP11485	W	20030909	<--
OS	MARPAT 140:311707			
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

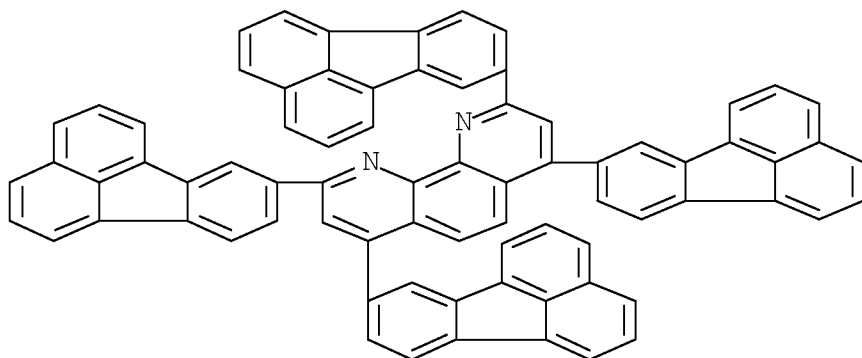
AB Phenanthroline derivs. are described by the general formulas I, II, and III (R1-16 = independently selected H, (un)substituted alkyl, (un)substituted aralkyl, (un)substituted aryl, (un)substituted heterocyclic, and halo atom; Ar1-8 = independently selected (un)substituted fluorenyl, (un)substituted fluoranthenyl, (un)substituted perylenyl, and (un)substituted carbazolyl). Org. light-emitting devices using the phenanthroline derivs. (e.g., as an electron-transporting layer or a light-emitting layer) are also described.

IT 676542-74-8 676542-75-9 676542-79-3
676542-87-3

(phenanthroline derivs. and org. light-emitting devices using them)

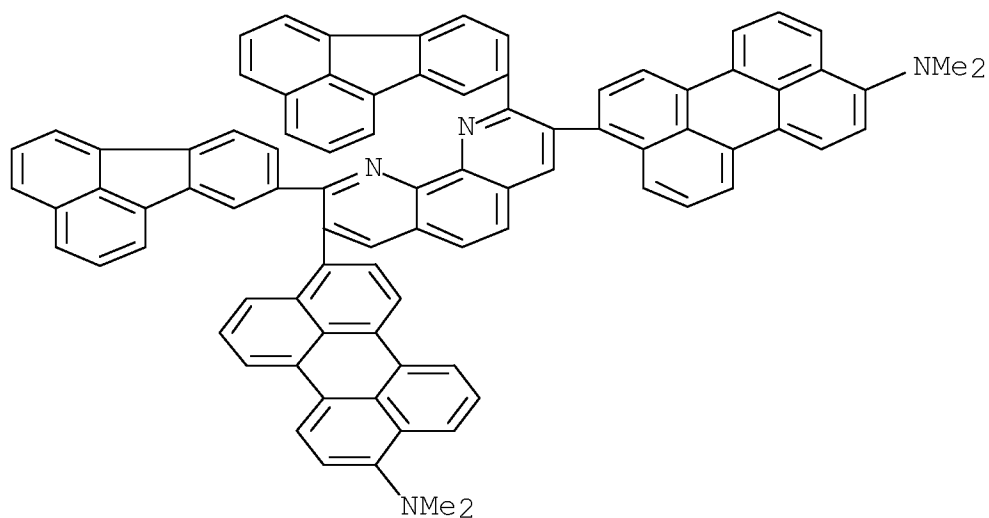
RN 676542-74-8 ZCA

CN 1,10-Phenanthroline, 2,4,7,9-tetra-8-fluoranthenyl- (CA INDEX NAME)

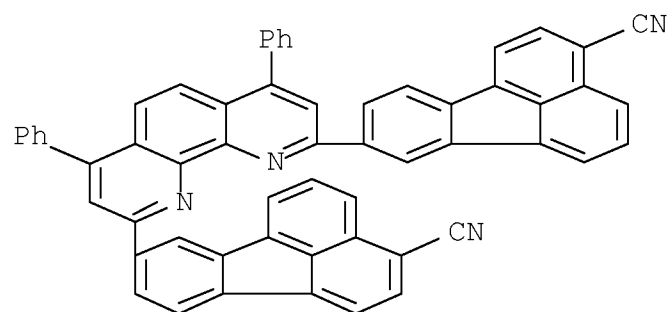


RN 676542-75-9 ZCA

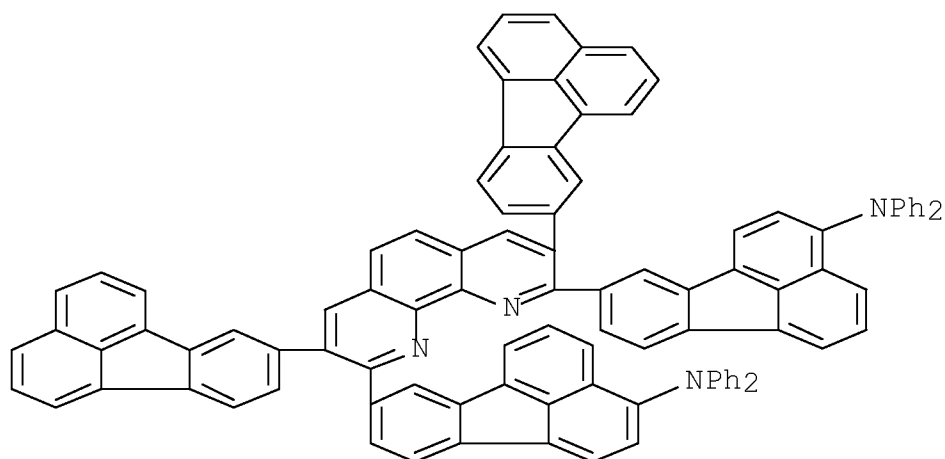
CN 3-Perylenamine, 9,9'-(2,9-di-8-fluoranthenyl-1,10-phenanthroline-3,8-diyl)bis[N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 676542-79-3 ZCA
 CN 3-Fluoranthene carbonitrile, 8,8'-(4,7-diphenyl-1,10-phenanthroline-2,9-diyl)bis- (CA INDEX NAME)



RN 676542-87-3 ZCA
 CN Benzo[4,5]cyclopenta[1,2,3-de]naphthalen-3-amine,
 8-[3,8-bis(benzo[4,5]cyclopenta[1,2,3-de]naphthalen-8-yl)-9-[4-(diphenylamino)benzo[4,5]cyclopenta[1,2,3-de]naphthalen-8-yl]-1,10-phenanthroline-2-yl]-N,N-diphenyl- (CA INDEX NAME)



IT 676542-74-8 676542-75-9 676542-79-3
676542-87-3

(phenanthroline derivs. and org. light-emitting devices using them)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 11 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 140:294505 ZCA Full-text

TI Organic electroluminescent device comprising diazafluorene compound

IN Suzuki, Koichi; Kasahara, Aki; Kawai, Tatsuhito; Hasegawa, Toshinori; Okinaka, Keiji; Senoo, Akihiro

PA Canon Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2004091444	A	20040325	JP 2002-258591	20020904

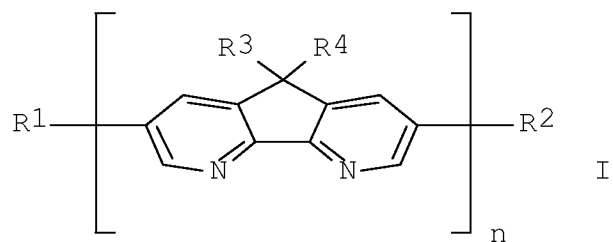
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PRAI JP 2002-258591

20020904 <--

OS MARPAT 140:294505

GI



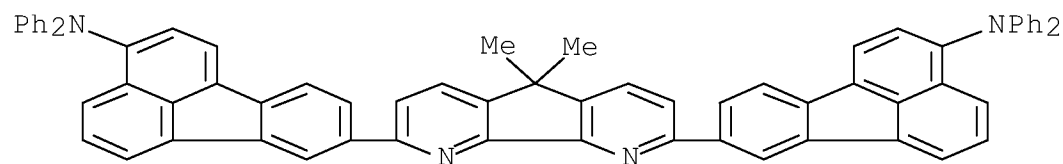
AB The invention relates to an org. electroluminescent device comprising diazafluorene compd. represented by I [R1 and R2 = H, alkyl, aryl, etc.; R3 and R4 = H, alkyl, aryl, and heterocyclic; n = 1-10 integer].

IT 675600-07-4 675600-29-0 675600-34-7

(org. electroluminescent device comprising diazafluorene compd.)

RN 675600-07-4 ZCA

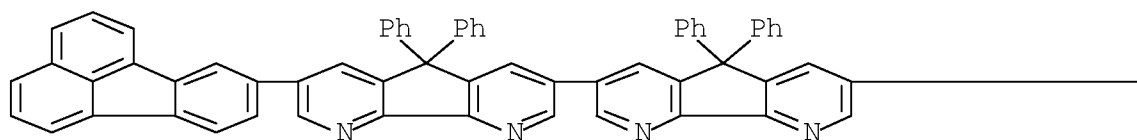
CN 3-Fluorantheneamine, 8,8'-(5,5-dimethyl-5H-cyclopenta[2,1-b:3,4-b']dipyridine-2,8-diyl)bis[N,N-diphenyl- (9CI) (CA INDEX NAME)

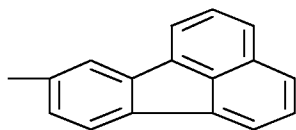


RN 675600-29-0 ZCA

CN 3,3'-Bi-5H-cyclopenta[2,1-b:3,4-b']dipyridine, 7,7'-di-8-fluoranthenyl-5,5,5',5'-tetraphenyl- (9CI) (CA INDEX NAME)

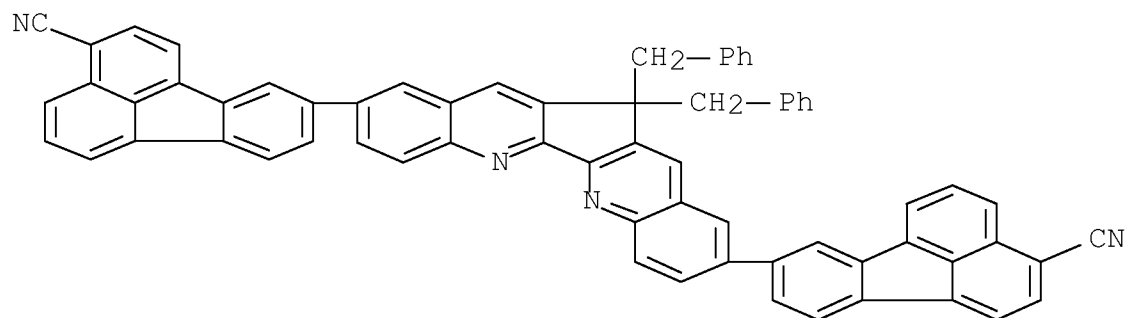
PAGE 1-A





RN 675600-34-7 ZCA

CN 3-Fluoranthracenecarbonitrile, 8-[9-(4-cyano-8-fluoranthenyl)-12,12-bis(phenylmethyl)-12H-cyclopenta[2,1-b:3,4-b']diquinolin-2-yl]-(9CI) (CA INDEX NAME)



IT 675600-07-4 675600-29-0 675600-34-7
(org. electroluminescent device comprising diazafluorene compd.)

L14 ANSWER 12 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 132:187598 ZCA Full-text

TI Electrophotographic photoreceptor containing triarylamine
charge-transporting agent, process cartridge, and apparatus

IN Kikuchi, Norihiro; Kanamaru, Tetsuo; Kunieda, Mitsuhiro

PA Canon Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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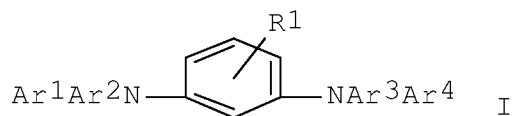
PI JP 2000056489	A	20000225	JP 1998-233500	

199808

PRAI JP 1998-233500
OS MARPAT 132:187598
GI

19980806 <--

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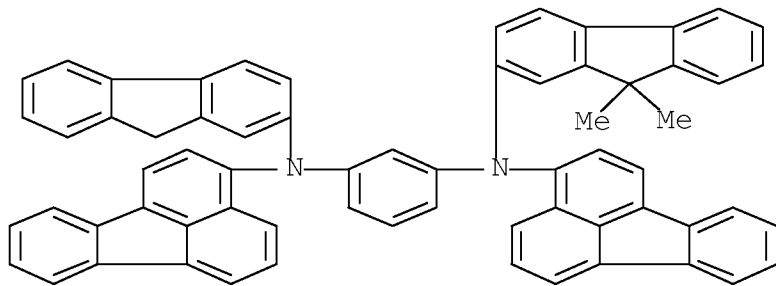


AB The photoreceptor comprising an elec. conducting support having thereon a photosensitive layer contg. I [Ar1, Ar4 = (substituted) aryl; Ar2, Ar3 = (substituted)fluorenyl; R1 = H, halo, cyano, NO2, alkyl, alkoxy, aryloxy]. The process cartridge contains the obtained photoreceptor, ≥1 of charging, developing, and cleaning devices, is detachable to a main machine. The electrophotog. app. involves the photoreceptor, a charging, an imagewise exposing, a developing, and a transfer device. The photoreceptor shows high sensitivity, anti-cracking property, less transfer memory, and less crystn. of a charge transporting agent.

IT 259244-59-2
(electrophotog. photoreceptor contg. triarylamine charge-transporting agent)

RN 259244-59-2 ZCA

CN 1,3-Benzenediamine, N1-(9,9-dimethyl-9H-fluoren-2-yl)-N1,N3-di-3-fluoranthenyl-N3-9H-fluoren-2-yl- (CA INDEX NAME)



IT 259244-59-2

(electrophotog. photoreceptor contg. triarylamine
charge-transporting agent)

L14 ANSWER 13 OF 13 ZCA COPYRIGHT 2008 ACS on STN

AN 117:16860 ZCA Full-text

OREF 117:2955a,2958a

TI Electroluminescent device with organic electroluminescent medium

IN VanSlyke, Steven A.; Tang, Ching W.; O'Brien, Michael E.; Chen, Chin
H.

PA Eastman Kodak Co., USA

SO U.S., 12 pp.

CODEN: USXXAM

DT Patent

LA English

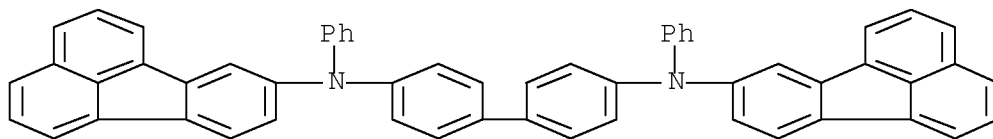
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 5061569	A	19911029	US 1990-561552	199007 26
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	CA 2046135	A1	19920127	CA 1991-2046135	199107 03
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	CA 2046135	C	19961210		
	JP 05234681	A	19930910	JP 1991-186312	199107 25
				<--	
	JP 2851185	B2	19990127		
	EP 468528	A1	19920129	EP 1991-112621	199107 26
				<--	
	EP 468528	B1	19950621		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
PRAI	US 1990-561552	A	19900726	<--	

OS MARPAT 117:16860

AB Internal junction org. electroluminescent devices are described which
comprise an anode, an org. hole-injecting and -transporting layer, an
org. electron-injecting and -transporting layer, and a cathode in
which the hole-injecting and -transporting zone employs a hole-
transporting arom. tertiary amine comprising ≥ 2 tertiary amine
moieties and includes an arom. moiety contg. ≥ 2 fused arom. rings
which is attached to a tertiary amine N atom.

IT 139255-23-5
 (electroluminescent devices with hole-transporting layers from)
 RN 139255-23-5 ZCA
 CN [1,1'-Biphenyl]-4,4'-diamine, N4,N4'-di-8-fluoranthenyl-N4,N4'-
 diphenyl- (CA INDEX NAME)



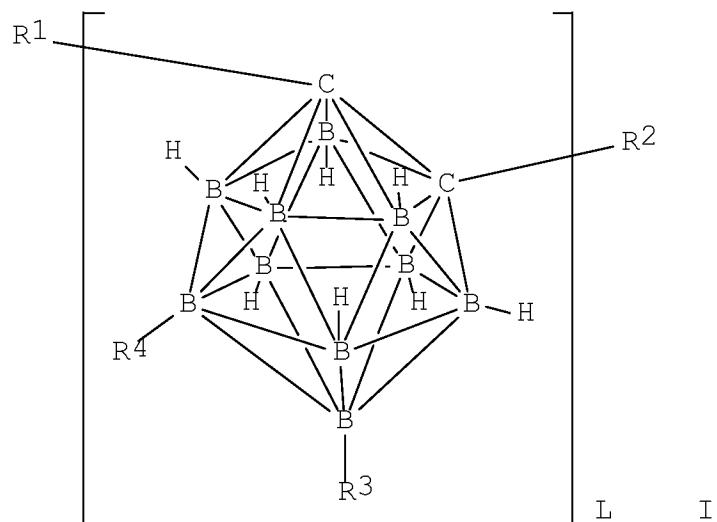
IT 139255-23-5
 (electroluminescent devices with hole-transporting layers from)

=> D L15 1-6 BIB ABS HITSTR HITRN

L15 ANSWER 1 OF 6 ZCA COPYRIGHT 2008 ACS on STN
 AN 143:86374 ZCA Full-text
 TI Organic electroluminescent device using carborane compound
 IN Suzuki, Koichi; Okajima, Aki; Ueno, Kazunori
 PA Canon Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 47 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005166574	A	20050623	JP 2003-406967	20031205

PRAI JP 2003-406967 20031205 <--
 OS MARPAT 143:86374
 GI



AB The invention refers to an electroluminescent device comprising at least one layer contg. carborane compd. I [R₁-4 = H, (un)substituted alkyl, aryl heterocycle, condensed polycyclic arom. or condensed polycyclic heterocycle; L = 1 - 20].

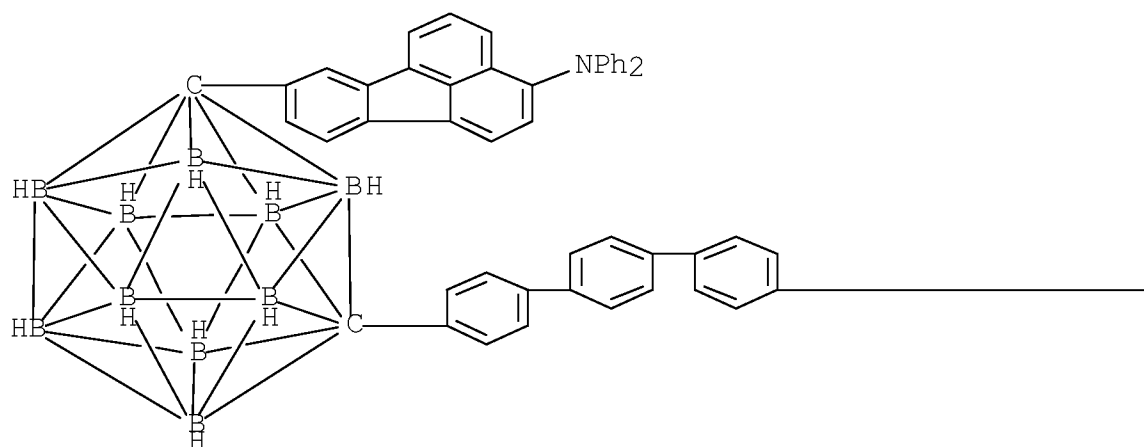
IT 855312-46-8

(Org. electroluminescent device using carborane compd.)

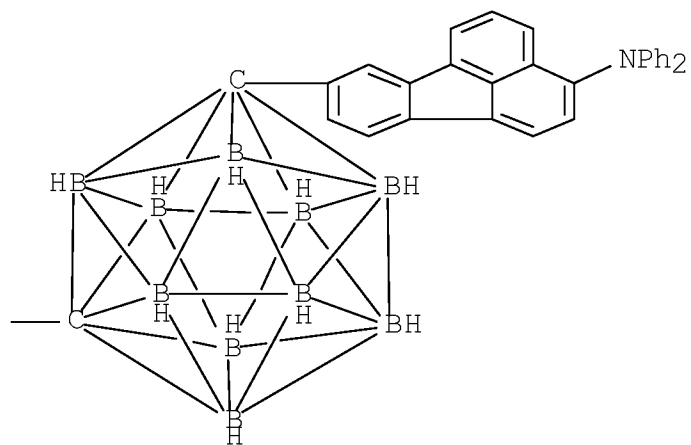
RN 855312-46-8 ZCA

CN 3-Fluorantheneamine, 8,8'-[[1,1':4',1''-terphenyl]-4,4''-diylbis(1,7-dicarbadodecaborane(12)-7,1-diyl)]bis[N,N-diphenyl- (9CI) (CA INDEX NAME)

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IT 835312-46-8

(Org. electroluminescent device using carborane compd.)

L15 ANSWER 2 OF 6 ZCA COPYRIGHT 2008 ACS on STN

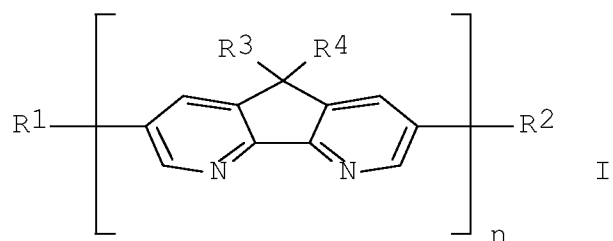
AN 140:294505 ZCA Full-text
 TI Organic electroluminescent device comprising diazafluorene compound
 IN Suzuki, Koichi; Kasahara, Aki; Kawai, Tatsuhito; Hasegawa,
 Toshinori; Okinaka, Keiji; Senoo, Akihiro
 PA Canon Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 41 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	JP 2004091444	A	20040325	JP 2002-258591	200209 04

PRAI JP 2002-258591 20020904 <--
 OS MARPAT 140:294505
 GI



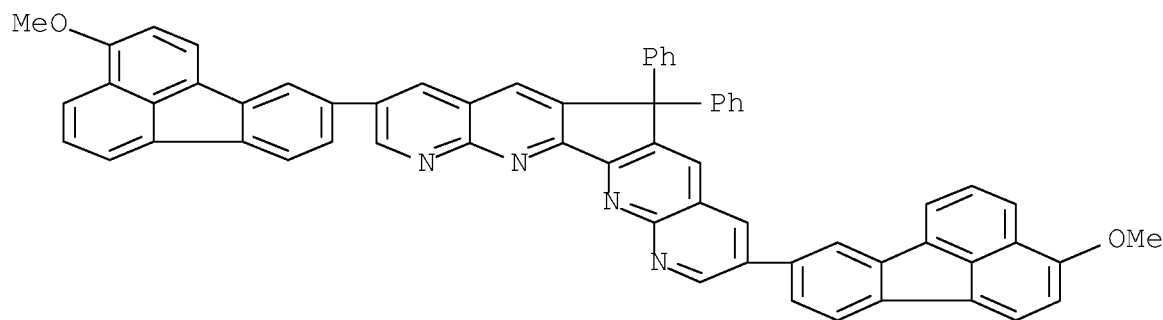
AB The invention relates to an org. electroluminescent device comprising diazafluorene compd. represented by I [R1 and R2 = H, alkyl, aryl, etc.; R3 and R4 = H, alkyl, aryl, and heterocyclic; n = 1-10 integer].

IT 675600-43-8

(org. electroluminescent device comprising diazafluorene compd.)

RN 675600-43-8 ZCA

CN 6H-Cyclopenta[2,1-b:3,4-b']di[1,8]naphthyridine,
 3-(3-methoxy-8-fluoranthenyl)-9-(4-methoxy-8-fluoranthenyl)-6,6-
 diphenyl- (9CI) (CA INDEX NAME)



IT 675600-43-8

(org. electroluminescent device comprising diazafluorene compd.)

L15 ANSWER 3 OF 6 ZCA COPYRIGHT 2008 ACS on STN

AN 136:207522 ZCA Full-text

TI Fluoranthene compounds, and organic electroluminescent device
employing same compounds

IN Hosokawa, Chishio; Iwakuma, Toshihiro

PA Idemitsu Kosan Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002069044	A	20020308	JP 2000-255141	20000825

<--

PRAI JP 2000-255141 20000825 <--

OS MARPAT 136:207522

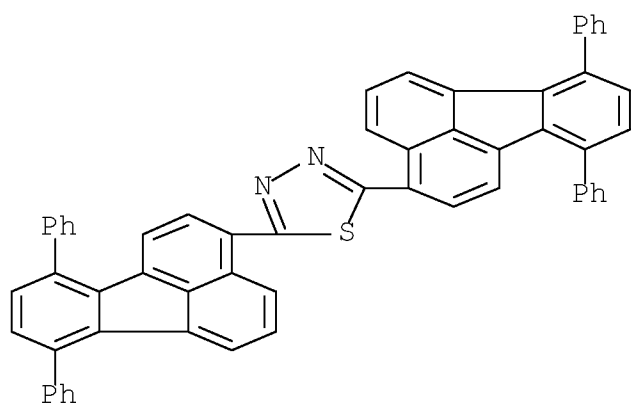
AB Title fluoranthene compd. Xn-Ar [Ar = (substituted) C6-40 arom. ring, C6-40 arylamino, C6-60 diaminoaryl, C6-60 triaminoaryl, C3-40 heterocycle, or (substituted) ethenylene; X = monovalent fluoranthene compd.; n = 2-4] is claimed. Also claimed is an org. electroluminescent device contg. the fluoranthene compd. in (multilayered) org. compd. film. The device shows high heat resistance and provides high emission efficiency.

IT 401813-23-8P 401813-24-9P

(fluoranthene compds., and org. electroluminescent device contg. same compds.)

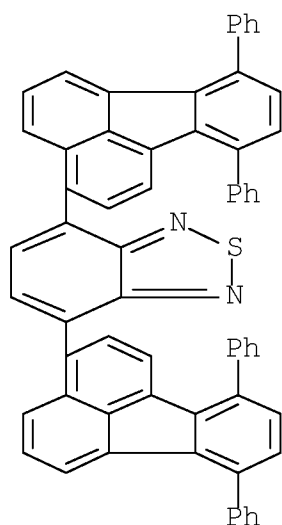
RN 401813-23-8 ZCA

CN 1,3,4-Thiadiazole, 2,5-bis(7,10-diphenyl-3-fluoranthenyl)- (CA INDEX NAME)



RN 401813-24-9 ZCA

CN 2,1,3-Benzothiadiazole, 4,7-bis(7,10-diphenyl-3-fluoranthenyl)- (CA INDEX NAME)

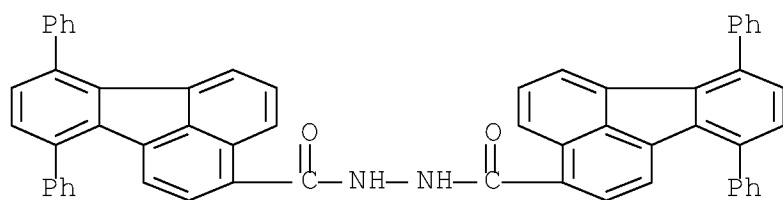


IT 401813-31-8P

(in prepn. of fluoranthene compds. for org. electroluminescent device)

RN 401813-31-8 ZCA

CN 3-Fluoranthencarboxylic acid, 7,10-diphenyl-, 2-[(7,10-diphenyl-3-fluoranthenyl)carbonyl]hydrazide (CA INDEX NAME)



IT 401813-23-8P 401813-24-9P
 (fluoranthene compds., and org. electroluminescent device contg.
 same compds.)

IT 401813-31-8P
 (in prepn. of fluoranthene compds. for org. electroluminescent
 device)

L15 ANSWER 4 OF 6 ZCA COPYRIGHT 2008 ACS on STN

AN 114:177108 ZCA Full-text

OREF 114:29667a,29670a

TI New derivatives of diphenyl thiophosphoric and diphenyl phosphoric
 acids. 3. Synthesis and complexing properties of
 N-(3-fluoranthenyl)-N'-(diphenylthiophosphoryl)thiourea

AU Bovykin, B. A.; Shenbor, M. I.; Tikhnov, V. I.; Semeryazhko, N. V.
 CS USSR

SO Voprosy Khimii i Khimicheskoi Tekhnologii (1989), 90, 43-6
 CODEN: VKKCAJ; ISSN: 0321-4095

DT Journal

LA Russian

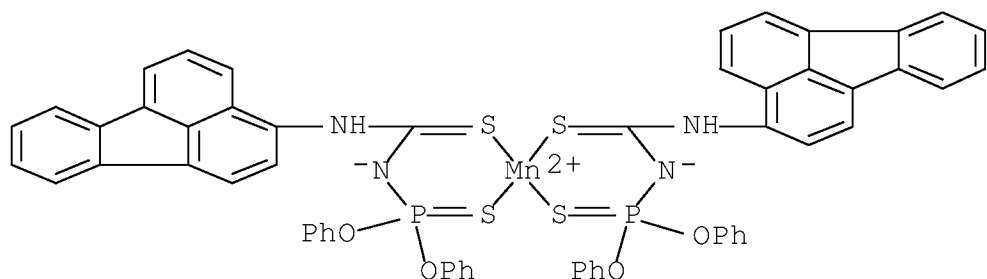
OS CASREACT 114:177108

AB N-(3-Fluoranthenyl)-N'-(diphenylthiophosphoryl)thiourea (HL) was
 prepd. from SCN(S)P(OPh)₂ and 3-aminofluoranthene; ML₂ (M = Mn, Fe,
 Co, Ni, Cu, Zn) were prepd. from HL and M(OAc)₂ in aq. Me₂CO in the
 presence of NaOH. ML₂ and HL were characterized by IR spectra. L is
 bidentate, coordinating through the 2 S atoms.

IT 133017-75-1P 133017-76-2P 133017-77-3P
 133017-78-4P 133017-79-5P 133017-80-8P
 (prepn. and IR spectrum of)

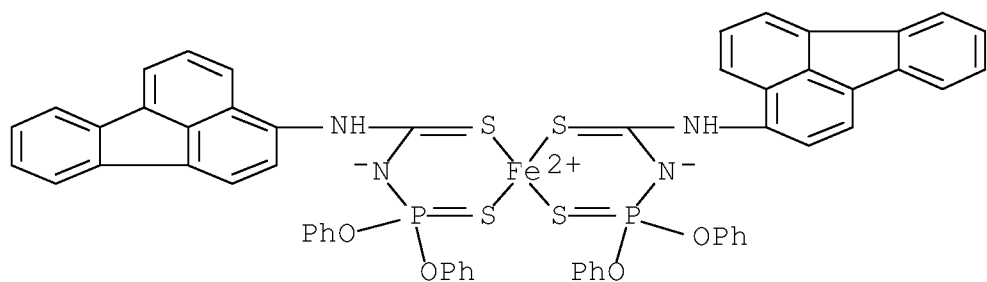
RN 133017-75-1 ZCA

CN Manganese, bis[O,O-diphenyl [(3-fluoranthenylamino)thioxomethyl]phos
 phoramidothioato-S,S']- (9CI) (CA INDEX NAME)



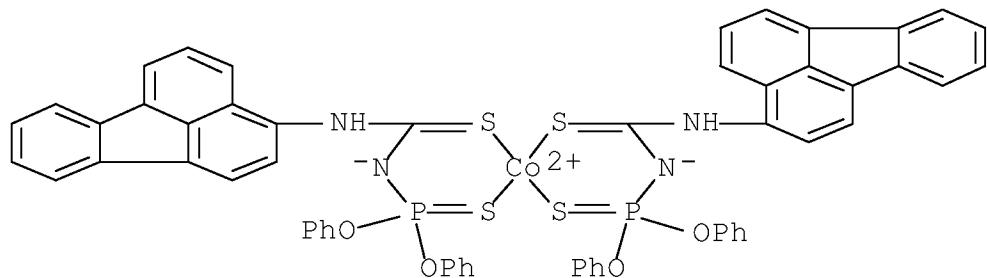
RN 133017-76-2 ZCA

CN Iron, bis[O,O-diphenyl [(3-fluoranthenylamino)thioxomethyl]phosphoramidothioato-S,S']- (9CI) (CA INDEX NAME)



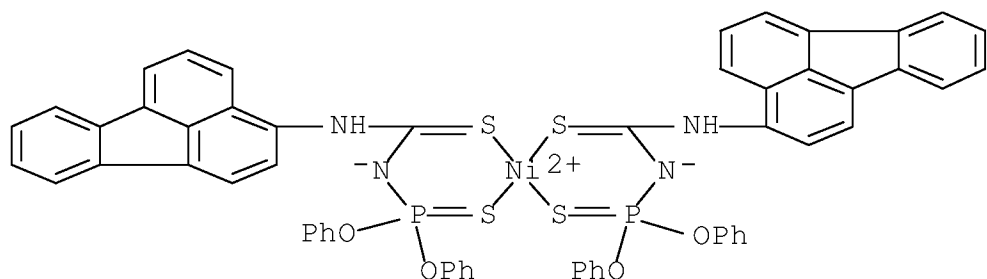
RN 133017-77-3 ZCA

CN Cobalt, bis[O,O-diphenyl [(3-fluoranthenylamino)thioxomethyl]phosphoramidothioato-S,S']- (9CI) (CA INDEX NAME)



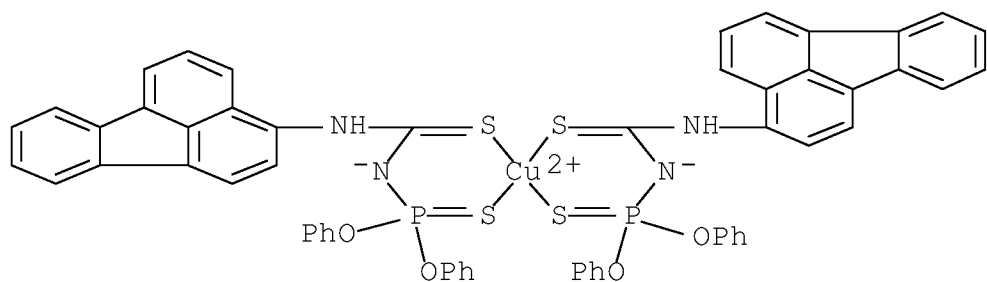
RN 133017-78-4 ZCA

CN Nickel, bis[O,O-diphenyl [(3-fluoranthenylamino)thioxomethyl]phosphoramidothioato-S,S']- (9CI) (CA INDEX NAME)



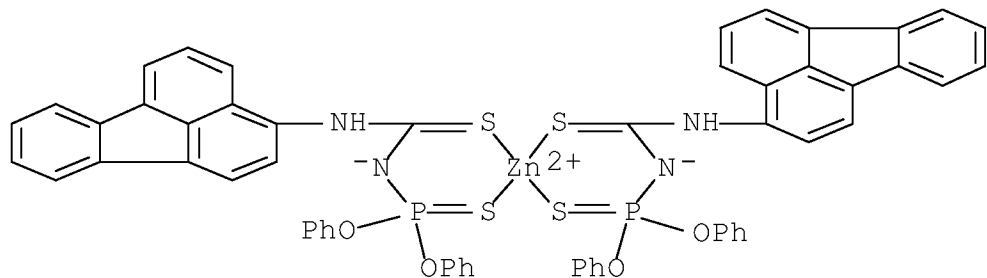
RN 133017-79-5 ZCA

CN Copper, bis[O,O-diphenyl [(3-fluoranthenylamino)thioxomethyl]phosphoramidothioato-S,S']- (9CI) (CA INDEX NAME)



RN 133017-80-8 ZCA

CN Zinc, bis[O,O-diphenyl [(3-fluoranthenylamino)thioxomethyl]phosphoramidothioato-S,S']-, (T-4)- (9CI) (CA INDEX NAME)



IT 133017-75-1P 133017-76-2P 133017-77-3P
 133017-78-4P 133017-79-5P 133017-80-8P
 (prepn. and IR spectrum of)

L15 ANSWER 5 OF 6 ZCA COPYRIGHT 2008 ACS on STN

AN 113:14802 ZCA Full-text

OREF 113:2471a,2474a

TI Octazonium salt compounds and tetrakisazo compounds and manufacture thereof

IN Yamada, Yasuyuki; Ito, Naoto; Nishizawa, Isao; Yamaguchi, Teruhiro

PA Mitsui Toatsu Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

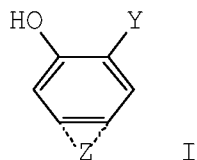
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO. ----- -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
PI	JP 01230573	A	19890914	JP 1988-277303	198811 04
				<--	
	JP 08026013	B	19960313		
PRAI	JP 1987-290700	A1	19871119	<--	
GI					



AB The title salts have the general formula $Q(-p-C_6H_4N_2^+ X^-)_4$ (Q = thiophene-1,1-dioxide-2,3,4,5-tetrayl; X^- = anion) which are coupled with I [at o-position with respect to OH, Z = (un)substituted carbo- or heterocycle member; Y = $-CONR_1R_2$, $CONHN:CR_3R_4$; R_1 = (un)substituted carbo- or heterocycle group; R_2 = H, (un)substituted alkyl, phenyl; R_3 = (un)substituted carbocycle group; R_4 = H, alkyl, (un)substituted phenyl; R_3R_4 = ring member] to give the title tetrakisazo compds. $Q(-p-C_6H_7N:NA)_4$ useful as charge generators in electrophotog. photoconductors.

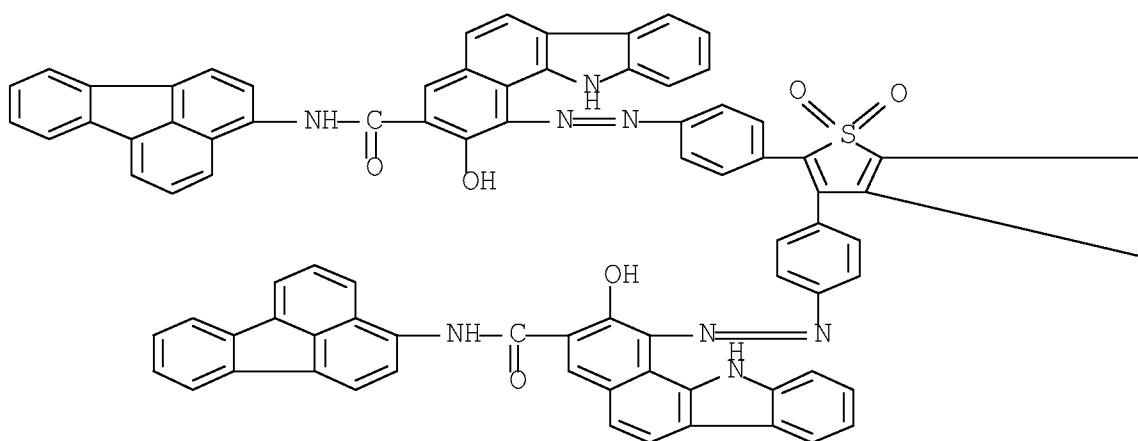
IT 127637-37-0P

(manuf. and use of, as charge generator in electrophotog. photoconductors)

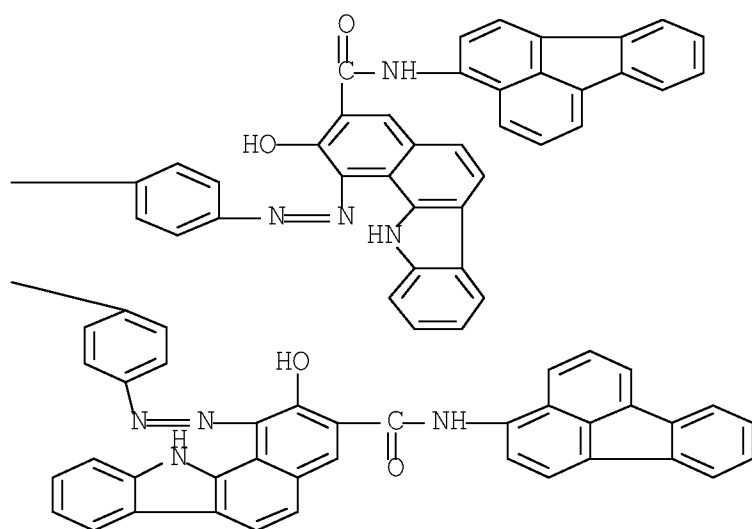
RN 127637-37-0 ZCA

CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl) tetrakis(4,1-phenyleneazo)] tetrakis[N-3-fluoranthenyl-2-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 127637-37-0P

(manuf. and use of, as charge generator in electrophotog.
photoconductors)

L15 ANSWER 6 OF 6 ZCA COPYRIGHT 2008 ACS on STN

AN 110:163563 ZCA Full-text

OREF 110:26917a,26920a

TI Electrophotographic photoreceptor containing charge-generating azo
pigment

IN Kashizaki, Yoshiro

PA Canon K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

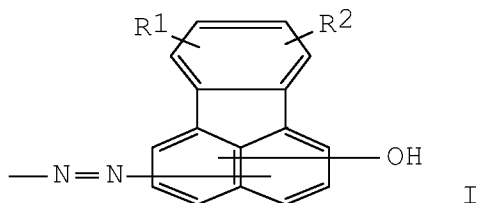
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 63282745	A	19881118	JP 1987-116770	198705 15
				<--	
	JP 2558118	B2	19961127		
PRAI	JP 1987-116770		19870515	<--	
GI					



AB The title photoreceptor has on an elec. conductive support a
photosensitive layer contg. an azo pigment having a structure in
which an arom. hydrocarbon ring or an arom. heterocyclic ring is
bonded to an org. residue I (R1, R2 = H, alkyl, aralkyl, aryl,

heterocyclyl, NO₂, CN, halo, halomethyl, amino; they may form a ring) directly or via a linking group.

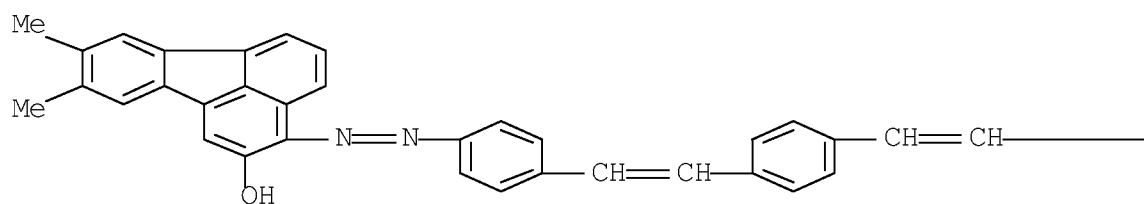
IT 119957-74-3 119957-76-5 119957-77-6
119957-78-7 119957-86-7

(electrophotog. charge-generating pigment, for improved sensitivity)

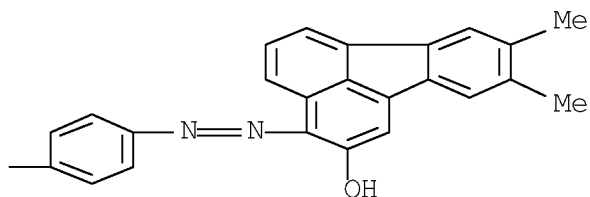
RN 119957-74-3 ZCA

CN 2-Fluoranthanol, 3,3'-[1,4-phenylenebis(2,1-ethenediyl-4,1-phenyleneazo)]bis[8,9-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A

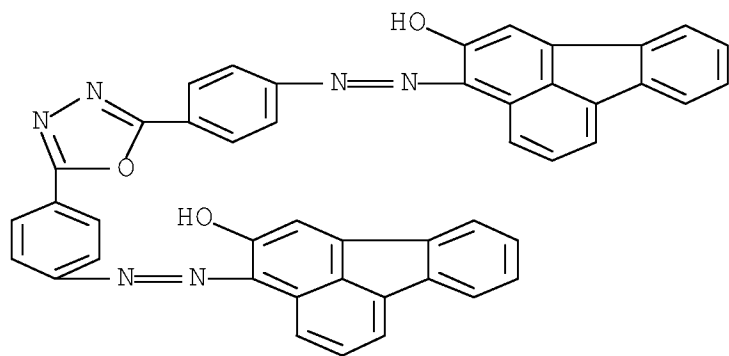


PAGE 1-B



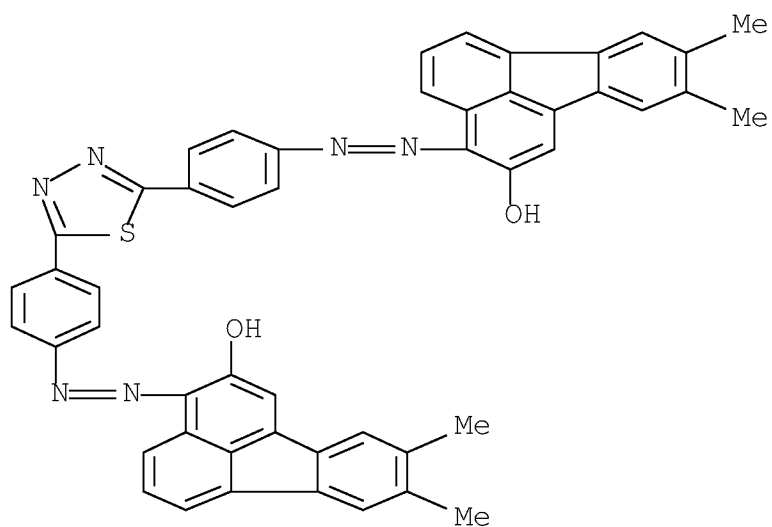
RN 119957-76-5 ZCA

CN 2-Fluoranthanol, 3,3'-[1,3,4-oxadiazole-2,5-diylbis(4,1-phenyleneazo)]bis- (9CI) (CA INDEX NAME)



RN 119957-77-6 ZCA

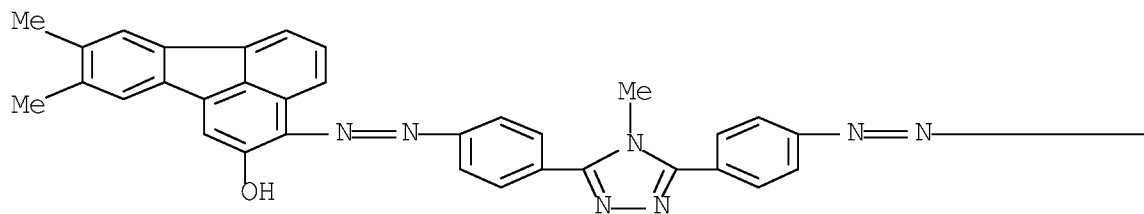
CN 2-Fluoranthanol, 3,3'-[1,3,4-thiadiazole-2,5-diylbis(4,1-phenyleneazo)]bis[8,9-dimethyl- (9CI) (CA INDEX NAME)



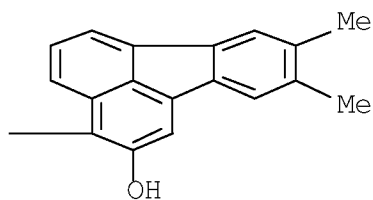
RN 119957-78-7 ZCA

CN 2-Fluoranthanol, 3,3'-[(4-methyl-4H-1,2,4-triazole-3,5-diyl)bis(4,1-phenyleneazo)]bis[8,9-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



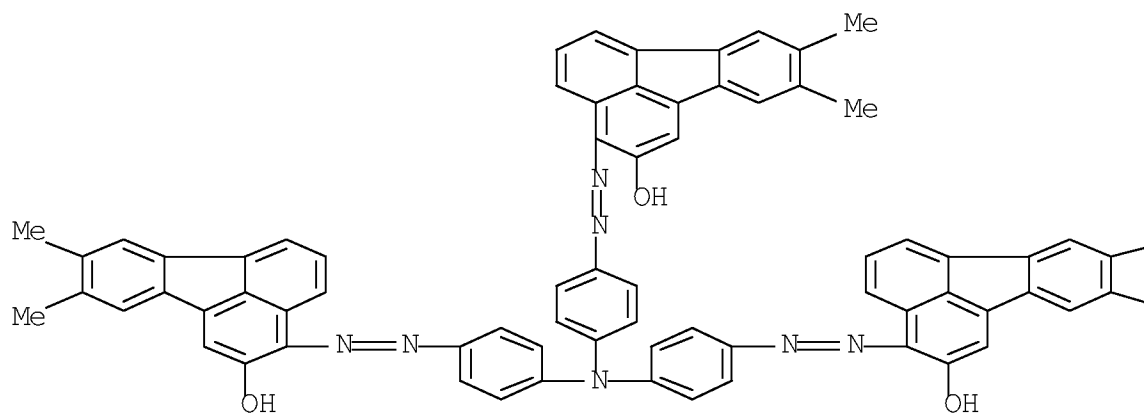
PAGE 1-B



RN 119957-86-7 ZCA

CN 2-Fluoranthene-1,8-diol, 3,3',3''-[nitritotris(4,1-phenyleneazo)]tris[8,9-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



— Me

— Me

IT 119957-74-3 119957-76-5 119957-77-6
119957-78-7 119957-86-7
(electrophotog. charge-generating pigment, for improved
sensitivity)